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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,345	04/07/2004	Ping-Lin Kuo	08688.0339US01	8124
23552	7590	05/03/2007		
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER HAILEY, PATRICIA L	
			ART UNIT 1755	PAPER NUMBER
			MAIL DATE 05/03/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/820,345

**Applicant(s)**

KUO ET AL.

**Examiner**

Patricia L. Hailey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 4, 2007, has been entered.

As set forth in the Request for Continued Examination, the Amendment after Final Rejection filed by Applicants on February 8, 2007, has been entered. With the entry of this amendment, no claims have been canceled, but new claims 14 and 15 have been added.

Claims 1-15 are now pending in this application.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. ***Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamauchi et al. (U. S. Patent No. 3,988,288).***

Yamauchi et al. disclose a composition comprising an epoxy compound and an amino polyester resin as essential components, but may also contain other resins or

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other compounds, such as pigments and additives. See the Abstract of Yamauchi et al., as well as col. 2, lines 60-65 and col. 6, lines 42-45.

The type of epoxy compound "is not limited from any point" (col. 4, lines 13-16); examples thereof include any polyepoxide compounds containing two or more epoxy groups, such as diglycidyl esters and epoxy-group containing acyclic resins. See col. 6, lines 21-41 of Yamauchi et al. Because this reference discloses an epoxy compound recited in the instant claims (e.g., claim 3), the claim limitations regarding the "epoxy equivalent weight" are considered inherently encompassed by Yamauchi et al.

The composition can be prepared by mixing the amino polyester resin with the epoxy compound, and preferably with other resins or other compounds, coloring pigments, extender pigments, etc., and blending the mixture in conventional methods (considered to read upon the term "reacted" in the instant claims). See col. 3, lines 23-27 of Yamauchi et al., as well as col. 7, lines 37-51, which discloses exemplary blending conditions, i.e., under melt at an elevated temperature of 80°C to 130°C, and also discloses the feasibility in including additives such as wetting agents, leveling agents, flow control agents, antifoam agents, etc. (considered to read upon the limitations "dispersing agent" and "solvent" in claims 1, 5, and 9, respectively).

In view of these teachings, Yamauchi et al. anticipate claims 1-15.

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**4. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohnishi (U. S. Patent No. 5,747,599).**

Ohnishi discloses compositions comprising (a) an epoxy compound, (b) an aromatic sulfonium salt, (c) an acidic pigment or (d) a neutral or basic pigment, and (e) an acidic substance. See col. 1, lines 58-65 of Ohnishi.

Examples of the epoxy compound include polyalkylene ether type compounds such as (poly) ethylene glycol diglycidyl ether, glycidyl ester type epoxy compounds, alicyclic epoxy compounds, homopolymers of unsaturated epoxy-containing monomers such as glycidyl (meth)acrylate, etc. See col. 2, line 27 to col. 3, line 15 of Ohnishi, which also discloses that the epoxy equivalent of the epoxy compound is not critical, but is suitably in the range of about 65 to about 50,000, preferably about 180 to about 5000.

The coating compositions may also contain organic solvents, as well as agents such as pigment dispersants. See, for example, col. 6, lines 16-41 of Ohnishi.

The compositions can be prepared in "the conventional manner", such as by mixing. See: (1) col. 6, lines 8-15 of Ohnishi, as well as col. 8, lines 1-12, in which the epoxy compound is dissolved or dispersed in an organic solvent, which is admixed with the sulfonium salt and a pigment paste, (2) col. 8, line 48 to col. 9, line 60, in which, in one embodiment, toluene (solvent), glycidyl methacrylate, styrene, methyl methacrylate, and n-butyl acrylate are admixed, and heated to undergo reaction to obtain an epoxy resin, and (3) Example 20, in which the epoxy resin is admixed with titanium dioxide.

In view of these teachings, Ohnishi anticipates claims 1-15.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays, from 7:00 a.m. to 3:30 p.m.

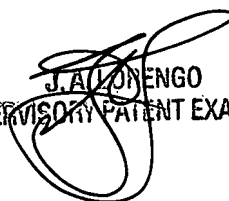
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Patricia L. Hailey/plh  
Examiner, Art Unit 1755  
April 30, 2007

  
J. A. LONGO  
SUPERVISORY PATENT EXAMINER